SMART*move*

INNOVATIVE URBAN MOBILITY CHALLENGE

GLOBAL CALL TO PARTICIPATE IN A NATIONAL
INITIATIVE TO REIMAGINE MOBILITY IN INDIAN CITIES

GUIDELINES

Government of India's efforts to become Aatma Nirbhar
(self-reliant) and digitally empowered

1 WHAT IS
SMART*move*

1.1 OVERVIEW

Government of India through Ministry of Housing and Urban Affairs (MoHUA) is implementing National Smart Cities Mission, an urban renewal program with an objective to develop smart cities across the country, making them citizen friendly and sustainable. The mission is being implemented in more than 100 cities in India and data is playing a key role in making plans and strategies for these smart cities.

Building on the National Smart Cities Mission, GIZ is supporting MoHUA in organizing a global data challenge with National Institute of Urban Affairs (NIUA) as implementation partner for organizing **SMART MOVE: Innovative Urban Mobility Challenge**, a global urban mobility challenge to address mobility challenges faced by Indian cities. The data challenge is outlined considering the Government of India's efforts to become Aatma Nirbhar (self-reliant) and help cities to transform into a digitally empowered society.

The main objective of the challenge is to develop solutions for enhancing innovation in urban mobility by taking the current situation as an opportunity to improve urban mobility system and to help public transport's and freight recovery from the ongoing COVID-19 crisis using big data.

The challenge will help improving the accessibility and mobility of people and goods by unlocking the potential of urban mobility datasets. Under the challenge, we are looking for an innovative solution in the urban mobility sector that can help cities with offering a safe, sustainable, efficient and smart urban transport systems.

1.2 WHAT MAKES A GOOD SMART MOVE PROPOSAL?

We are looking for innovative ideas to address various issues in the Indian mobility sector. The guiding factors for a good proposal should be distinctly contextual, implementable, scalable, time-bound, practical, financially feasible, measurable (objectively verifiable) and improve the urban mobility across one of the challenge theme area presented in section 2.

Ideas could vary from development of innovative technology for mobility management or development of specific digital solution or any other analytical tool to improve the way we commute and act as an incentive to promote sustainable mobility. The propose solution can help unlock the potential of urban mobility datasets in managing public transport systems, improved urban transport user experience, serve as a decision making tool, cater to smart mobility products like contactless payment, wider mode choice offerings and compliment initiatives to promote electric vehicles, smart parking, improved logistics, etc.

You know your team members best. Identify the expertise each one of you can offer to develop a real game-changer concept, where data and technology could be used using several analytical tools. The objective of the challenge is to support innovative ideas and find scalable solutions that positively impact the larger population of Indian cities.

Your idea should stand unique that can build on global best practices and align with the local context for best results.

1.3 DATA AVAILABILITY AND SHARING

A data portal will be developed which would allow the participants to access the mobility datasets from various cities made available by government authorities and private sector. The datasets shall be shared on the portal under a confidentiality agreement governing that the datasets can only be used for the purpose of participation as part of this competition.

The ideas/solutions are not limited to only data made available by the organizers. The participants are free to propose solutions beyond the dataset made available on the portal and are encouraged to use the data available with them or collection of their own datasets or they can also request organizers if any such data can be made available. The challenge evaluation committee will decide on the feasibility of available data for the proposed solution.

The proposal needs to be submitted under any of the three themes. Theme description is subject to change as per the data shared by the cities. The idea should be aligned to at least one of the three themes.

2 🔗 THE CHALLENGE THEMES

2.1 RESTORING PUBLIC TRANSPORT RIDERSHIP

COVID-19 recovery | Cost-effective solutions

COVID-19 recovery models that focus on the skewed mobility preferences and absence of safe mobility in the post-pandemic cities, either through technology-based ideas or innovative mobility plans for cost-effective solutions. The purpose is to use the available mobility datasets and understand commuter travel patterns to restore public transport operations. One must keep the demand management, fleet augmentation, data-driven, responsive approach, digitalization, real-time information etc. in mind.

2.2 ACHIEVING SUSTAINABLE TRANSPORT AND RESILIENCE

Multi-modal Integration | Sustainable transport modes

Ideas that give special attention to the distribution of street space for different users. It should further follow a thorough plan for promoting multi-modal integration and sustainable modes of transport – including Non-Motorised Transport (NMT), pedestrians, cyclists and other formal and informal para-transit modes. The proposal should give considerable importance to data interoperability and design approaches for each selected mode based on available and attainable datasets.

2.3 EQUITY IN MOBILITY

Gender and Safety | Inclusivity and efficiency improvement

Mobility ideas for people across all genders, age, income groups, and marginalized population. The proposals should pay attention to inclusivity and efficiency improvement, and affordable solutions considering the changing mobility patterns.

3 PARTICIPATION GUIDELINES

3.1 WHO CAN PARTICIPATE?

The participation in the data challenge is divided into the following two categories –

CATEGORY 1: University Participants (Open for Global teams)
- Under this category undergraduate, postgraduate and PhD students enrolled in a full-time programme in any university globally can take part
- The team can be a mix of faculty members, research associate and students working and studying full time in any University. Only faculty or only Research Associates team are not allowed to participate
- Team can also be an inter-university team between two universities. Collaboration between multidisciplinary participants are encouraged
- If the team is participating from any University outside India, at least one team member should be of Indian nationality who understands the local context of Indian mobility sector

CATEGORY 2: Other Participants (Open for India based teams)
- The challenge is flexible and if you are not under Category 1 (except for school students), you can participate in Category 2
- Under this category you can participate either as an Individual or a group of individual or as an organisation
- If you are a working professional and participating as individual capacity, you need to provide a No Objection Certificate from your affiliate organisation allowing you to participate in this event and confirming that your organization will have no liability or claim on your proposed solution
- If the team is participating as an organisation, the proposal shall be submitted along with a letter from the authorized representative of the company

3.2 TEAM REQUISITE

The team composition should strictly be based on above two categories. Apart from them a team must:
- Have no more than four members in participating as group of individuals
- The proposed solution to meet at least one of the challenge themes
- The team should be familiar with the Indian context and local character of selected project-site/cities
- The team members should demonstrate having appropriate knowledge required to develop their proposed solution
- Should provide a single named point of contact for key communications throughout the Challenge
- The idea should be unique to the team

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- Apart from the data portal, the team can access data from various sources with required authorization or collect their own datasets through primary and secondary surveys to substantiate the proposal, however the analysis and the final proposal should be unique of their own
- A team can submit a maximum of one idea in each of the three themes. However, there shall not be any repetition of proposal within the same theme. A unique email address should be used for each application
- The team should commit to engage in the various sessions and workshops as part of the challenge
- The team should abide by all the rules and regulations and respect the decisions made by the evaluation Panel
- The NOC for the team members where applicable should be submitted along with the final submission of phase II

4 REVIEW PROCESS

The review and shortlisting at Phase I and Phase III would be based on the evaluation criteria defined in Section 5.

i) **Phase** I: Initial concept note selection stage – The teams shall be shortlisted based on the concept note submission and the shortlisted team shall only be allowed to take the concept forward to the full solution development stage.

ii) **Phase** III: The final submissions would be evaluated to identify three winners

5 EVALUATION CRITERIA

5.1 CONCEPT STAGE

Uniqueness of idea

Understanding of the issue

Use of data sets specific to the mobility sector

Scalability of the idea

Proposal soundness and implementability

Operationally feasible (including financial sustainability)

Time-bound and measurable (objectively verifiable)

5.2 FINAL PROPOSAL STAGE

INNOVATION
(20% WEIGHTAGE)

- Degree to which the solution is innovative and different from the other entries in the themes;
- Level of improvement on the existing conditions and how the innovation enhances the resilience in mobility sector;
- Introducing a new or advanced strategy, business model, etc.

EFFECTIVENESS
(30% WEIGHTAGE)

- Address the challenge holistically;
- Extent to which the solution fits well in the Indian context;
- Capability to be used without substantial revisions;
- Emphasis on interoperability

SCALABILITY AND REPLICABILITY
(20% WEIGHTAGE)

- Likelihood that the solution can be affordably scaled for different cities with varying characters;
- Ability to work and adapt effectively with distinct data sets;
- Potential for successful implementation of the solution.

PUBLIC OUTREACH AND BENEFITS
(20% WEIGHTAGE)

- Focus on an implementable proposal to gain public buy-in and possibility to get support of the funding from other sources;
- Emphasis on societal impact – serve all sections of the society;
- Extent to which safety for women and benefits the marginalised population;
- Consideration of the Sustainability aspect in the mobility sector.

FEASIBILITY OF THE PROPOSED SOLUTIONS
(10% WEIGHTAGE)

- Does the solution feasible to be implemented in the urban mobility sector?

5.3 MENTORING PANEL

- A panel of experts will be put in place for both the stages
- The panel of experts shall have a composition of Jury and Mentors who are National and International experts from academia, industry, start-ups and officials from Ministry and participating cities.

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6 AWARD AND INCENTIVES

- All selected participants whose concept proposal clears the first phase evaluation will receive a certificate of participation.
- Top three teams shall receive a certificate of merit and opportunity to attend global events/courses in the area of smart mobility.
- The top three proposals – as identified by the jury – will be provided contracts jointly worth INR 20,00,000. The break-up will be determined by the jury with a minimum contract value of INR 5,00,000.
- The lead member representing the winning teams will be engaged under a professional contract with challenge organisers. The contract shall be for a minimum of 60 person days to further evolve their ideas into tangible, implementable solutions in the form of a Detailed Project Report that need to be developed over a minimum period of 1 month.
- This is not a simple open ideas competition, implementability is key during the whole process. In case a winning team is not willing to be contracted, no remuneration will be provided, and the next ranked entry shall be considered
- The winning teams will have an opportunity to present their solution to Smart Cities Mission, Government of India
- All participants hold the rights to their ideas and data they bring – they can choose to share their data for future use by others through open sources on the data portal set for the challenge.
- Mentorship by experts on specific topics through various workshops is mandatory.
- The final decision for this will be on the discretion of organisers and shall be binding.

Added benefits include:

- Free entries to several paid events in the mobility sector;
- Chance to take an online certificate course for free (specificities still to be decided)

7 TIMELINES

9 November 2020
Launch of SMART MOVE: Innovative Urban Mobility Challenge

15 November 2020
Registration Open

3 January 2021
Submission of Concept Note (Phase I)

22 January 2021
Announcement of Shortlisted Concept Notes (Phase I)

22 February 2021
Matchmaking and Partnering with Cities (Phase II)

22 March 2021
Submission of Final Solutions (Phase III)

11 April 2021
Announcement of Winner

8 GENERAL INSTRUCTIONS

Thank you for choosing to participate in the Smart Move: Innovative Urban Mobility Challenge. Here are some general instructions to guide you through the registration and application process:

1. Do not submit any confidential information through the application that may cause or have potential ethical implications

2. All applications must be submitted through the online portal

3. The data shall be shared under a confidentiality agreement and the participants team shall be responsible to keep the data only for the specific purpose

4. The proposed ideas should be original work of the team members

5. An application sheet will be shared for different stages of the challenge. All applications must abide by the given format and word limit at various stages to ensure precise documentation of ideas

6. Include the names and details of all team members in the applications

7. As part of the concept note proposal – Phase I – in case of absence of specific data, please state the data you will need for your proposed solution. Please mention clearly the data you already have access to, and the data the organizers can provide through the data portal for a robust data set

8. In cases teams are accessing data from multiple sources outside the team members' work domains, please state the source

9. The final submission must include the proposed solution as detailed out on the Concept Note. It can be submitted along with the report/presentation/video, or other helpful modes they think will best communicate their idea. Nevertheless, the details on word limit, time limit of file size limitations shall be mentioned in the provided application sheet

10. Teams may utilize the mentorship provided as a resource for guidance, direction, suggestions, and feedback. However, at no point throughout the challenge, should any team member approach a mentor, expert or panel member to be directly involved in the project as a member of the team. Such teams will be disqualified immediately

11. The participants of the competition declare to agree by submitting the competition entry that the contributions can be published in different media. Shortlisted entries can also be published and summarized in a public exhibition

12. Authors retain a copyright for their work. However, all submissions become the property of the challenge organizers, which has the right to publish all or any part of the submitted material

13. By entering the competition and ticking the box marked 'Submit' on the website application form, participants agree to be bound by the following Terms & Conditions:

I. Registration and submission of entries implies acceptance of the copyright conditions as follows

II. Copyright in all submitted material remains with the authors of the submission, but submissions are made on the explicit understanding that the organizers are free to publish and exhibit the contents of the submission, and advocate, adapt/ amalgamate any of the ideas in parts or full, provided the authorship of the ideas are at all times appropriately acknowledged, and in all cases without compensation, regardless of whether the authors have been declared as winners or not. No compensation can be sought only by the virtue of participating in the said competition

III. Organizers reserve all the legal rights to reject any proposal. A proposal will be excluded from participation under following conditions: Incomplete application or application not following the challenge guidelines. In case any participants who try to contact members of the jury will be disqualified. Entry is open to all persons except Jury Panelists, Steering Committee, Technical Committee, the Organizers, their immediate families or business partners

IV. The Submission Proposal must not infringe the intellectual property rights of any third party. This includes the use of third-party trademarks, images and/or copyright

V. Participants accept that the website and datasets is offered on an "as is" and "as available" basis. The organizers do not warrant that the website/datasets will be uninterrupted, timely, secure or error-free, that defects will be corrected, or that the website or the server that makes it available are free of software viruses or bugs or other defects

VI. The organizers do not have full control over, and disclaims all responsibility or, any content which participants may encounter, or events which may occur as a result of any participant's use of the website/dataset, to the fullest extent permitted by law, and the organizers shall not be liable for any damages or other losses of any type whatsoever incurred by participants as a result of their use of the website/ datasets

VII. Implementation of the winning entries is the sole discretion of the authorities involved. There is no legal claim to contract value or corresponding assets

VIII. The organizers reserve the right to withdraw or amend the competition and these terms and conditions in the event of any unforeseen circumstances arising outside their reasonable control

14. If you are participating as an individual under Category 2, required NOC must be submitted before the final submission of Phase II. Failure to do so will result in disqualification

15. Read the participation guidelines and FAQ's. For Any additional query contact us on smartmove@niua.org

We are excited to receive numerous smart ideas for the Indian Urban Mobility sector.

All the best!